

14 September 2022

Change notice for characteristics of The SINGLE PHASE MOTOR SUPERLINE Q SERIES

This notice will be superseded the previous version. (DR-M-0454-A)

Dear Customers,

We gratefully thank you for supporting MITSUBISHI ELECTRIC's induction motor products.

The SINGLE PHASE MOTOR SUPERLINE Q SERIES has a nameplate with some incorrect values indicated.

Therefore, the nameplate will be changed as the below details. Again, we apologize for the unintentional shows inaccurate information, and our company sincerely hopes to receive your continued support.

Detail

1. Objective Model

SINGLE PHASE INDUCTION MOTOR SUPERLINE Q SERIES

Type : Model name	Split Phase Start : SP-QR Capacitor Start : SC(F)-QR (V) Capacitor Start and Run : SCL(F)-QR (V,FV)
Output	1/4 - 10HP
Pole	4P
Frame size	A71 - 132ML
Voltage, Frequency	220/230/220V 50/50/60Hz

2. Change content

Motor characteristics (Rated current, Rated Rotation speed, Rated efficiency). The detail of characteristic changes is shown in table 1-6.

Significantly, the models listed in Table 4 and some models in table 5 and 6 have removed the efficiency rating.

Remark:

- 1) Due to this change, the values specified in the Nameplate, Test report, the representative values on Catalog, Outline drawing, Specification sheet, and Product specifications on the website will also change.
- 2) No change in the product's design, production process, quality control, and that is no effect in the safety of the product.
- 3) This change may affect the selection of peripheral devices (such as circuit breakers, contactors, protection devices, and thermal relays). Therefore, the customer should consider the rated current value according to this change.
- 4) In addition to nameplates and labels, no others change (Table 7).

3. Change period

This change starts from delivery of 2022/ August onwards.

Table 1 SINGLE PHASE SUPERLINE Q SERIES : Split phase start
Model name : SP-QR

underlined value => changed value

Output	Rated	220V / 50Hz		230V / 50Hz		220V / 60Hz		IE1 Applicable
		Before	After	Before	After	Before	After	
1/4HP	Current (A)	2.8	<u>2.7</u>	2.9	<u>2.8</u>	2.4	<u>2.2</u>	✓
	Speed (min ⁻¹)	1450	<u>1425</u>	1450	<u>1435</u>	1740	<u>1720</u>	
	Efficiency (%)	64.2	<u>58.5</u>	61.3	<u>58.5</u>	70.4	<u>66.0</u>	
1/3HP	Current (A)	3.1	<u>3.0</u>	3.2	<u>3.1</u>	2.8	<u>2.6</u>	✓
	Speed (min ⁻¹)	1440	<u>1420</u>	1440	<u>1425</u>	1730	<u>1715</u>	
	Efficiency (%)	67.1	<u>61.5</u>	65.5	<u>61.5</u>	72.3	<u>68.0</u>	
1/2HP	Current (A)	4.8	<u>4.8</u>	4.8	<u>5.1</u>	4.6	<u>4.0</u>	✓
	Speed (min ⁻¹)	1440	<u>1445</u>	1440	<u>1450</u>	1730	<u>1740</u>	
	Efficiency (%)	69.3	<u>66.8</u>	67.6	<u>66.8</u>	72.5	<u>70.0</u>	

Table 2 SINGLE PHASE SUPERLINE Q SERIES : Capacitor start
Model name : SC-QR (V)

Output	Rated	220V / 50Hz		230V / 50Hz		220V / 60Hz		IE1 Applicable
		Before	After	Before	After	Before	After	
1/4HP	Current (A)	2.6	2.6	2.7	2.7	2.3	<u>2.2</u>	✓
	Speed (min ⁻¹)	1450	<u>1425</u>	1450	<u>1430</u>	1740	<u>1720</u>	
	Efficiency (%)	65.5	<u>58.5</u>	62.5	<u>58.5</u>	70.8	<u>66.0</u>	
1/3HP	Current (A)	3.1	3.1	3.2	3.2	2.8	<u>2.7</u>	✓
	Speed (min ⁻¹)	1450	<u>1420</u>	1450	<u>1425</u>	1740	<u>1710</u>	
	Efficiency (%)	64.9	<u>61.5</u>	63.5	<u>61.5</u>	69.6	<u>68.0</u>	
1/2HP	Current (A)	4.3	<u>4.1</u>	4.3	<u>4.2</u>	3.6	3.6	✓
	Speed (min ⁻¹)	1430	1430	1430	<u>1435</u>	1720	1720	
	Efficiency (%)	70.0	<u>66.8</u>	70.4	<u>66.8</u>	72.7	<u>70.0</u>	

Table 3 SINGLE PHASE SUPERLINE Q SERIES : Capacitor start and Run
Model name : SCL-QR

Output	Rated	220V / 50Hz		230V / 50Hz		220V / 60Hz		IE1 Applicable
		Before	After	Before	After	Before	After	
1HP	Current (A)	5.2	<u>5.3</u>	5.3	<u>5.5</u>	4.6	<u>4.5</u>	✓
	Speed (min ⁻¹)	1430	<u>1445</u>	1440	<u>1450</u>	1720	<u>1740</u>	
	Efficiency (%)	77.5	<u>72.1</u>	75.6	<u>72.1</u>	81.1	<u>77.0</u>	
1.5HP	Current (A)	7.9	<u>7.8</u>	7.9	<u>8.1</u>	7.1	<u>6.6</u>	✓
	Speed (min ⁻¹)	1440	<u>1445</u>	1440	<u>1450</u>	1720	<u>1745</u>	
	Efficiency (%)	78.6	<u>75.0</u>	75.9	<u>75.0</u>	82.0	<u>79.0</u>	
2HP	Current (A)	10.4	<u>10.3</u>	10.5	<u>10.4</u>	9.4	<u>8.8</u>	✓
	Speed (min ⁻¹)	1450	1450	1450	1450	1740	<u>1750</u>	
	Efficiency (%)	80.1	<u>77.2</u>	77.5	<u>77.2</u>	82.9	<u>81.5</u>	
3HP	Current (A)	15.1	<u>15.8</u>	15.4	<u>15.8</u>	13.4	<u>13.6</u>	✓
	Speed (min ⁻¹)	1450	<u>1440</u>	1460	<u>1445</u>	1740	<u>1730</u>	
	Efficiency (%)	82.3	<u>79.7</u>	82.2	<u>79.7</u>	85.4	<u>83.0</u>	

Table 4 SINGLE PHASE SUPERLINE Q SERIES : Capacitor start and Run
Model name : SCL-QR

Output	Rated	220V / 50Hz		230V / 50Hz		220V / 60Hz		IE1 Applicable
		Before	After	Before	After	Before	After	
5HP	Current (A)	22.0	<u>22.4</u>	22.0	<u>22.1</u>	21.0	<u>22.1</u>	×
	Speed (min ⁻¹)	1450	1450	1460	1460	1740	1740	
	Efficiency (%)	84.5	※	84.5	※	85.0	※	
7.5HP	Current (A)	31.0	<u>32.1</u>	30.0	<u>30.8</u>	30.0	<u>31.4</u>	×
	Speed (min ⁻¹)	1450	1450	1450	1450	1740	1740	
	Efficiency (%)	86.0	※	86.0	※	87.0	※	
10HP	Current (A)	43.5	<u>44.7</u>	41.0	<u>43.0</u>	41.0	<u>43.7</u>	×
	Speed (min ⁻¹)	1440	1440	1450	<u>1445</u>	1730	<u>1725</u>	
	Efficiency (%)	86.3	※	86.3	※	87.5	※	

※ : not specified

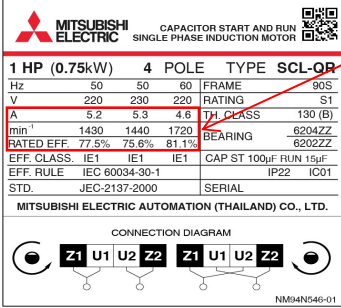
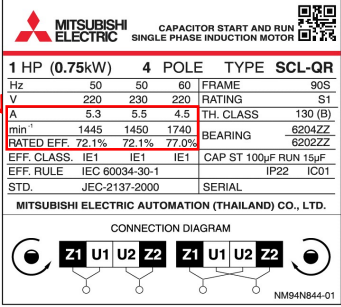
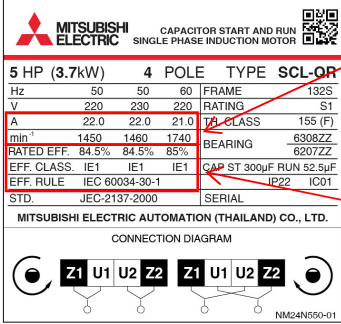
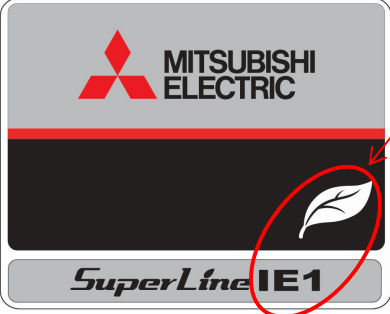
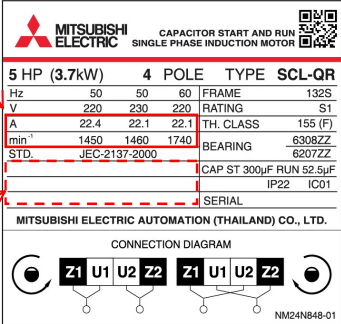
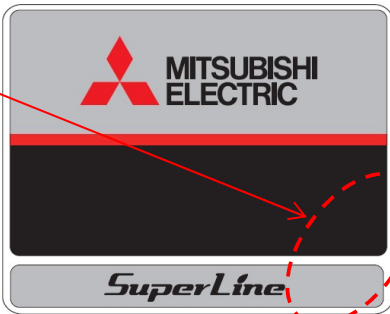
Table 5 SINGLE PHASE SUPERLINE Q SERIES : Capacitor start (Outdoor type)
Model name : SCF-QR (V)

Output	Rated	220V / 50Hz		230V / 50Hz		220V / 60Hz		IE1 Applicable
		Before	After	Before	After	Before	After	
1/4HP	Current (A)	2.6	2.6	2.7	2.7	2.3	<u>2.2</u>	×
	Speed (min ⁻¹)	1450	<u>1425</u>	1450	<u>1430</u>	1740	<u>1720</u>	
	Efficiency (%)	65.5	※	62.5	※	70.8	※	
1/3HP	Current (A)	3.1	3.1	3.2	3.2	2.8	<u>2.7</u>	×
	Speed (min ⁻¹)	1450	<u>1420</u>	1450	<u>1425</u>	1740	<u>1710</u>	
	Efficiency (%)	64.9	※	63.5	※	69.6	※	
1/2HP	Current (A)	4.3	<u>4.1</u>	4.3	<u>4.2</u>	3.6	3.6	✓
	Speed (min ⁻¹)	1430	1430	1430	<u>1435</u>	1720	1720	
	Efficiency (%)	70.0	<u>66.8</u>	70.4	<u>66.8</u>	72.7	<u>70.0</u>	

Table 6 SINGLE PHASE SUPERLINE Q SERIES : Capacitor start and Run (Outdoor type)
Model name : SCLF-QR (V,FV)

Output	Rated	220V / 50Hz		230V / 50Hz		220V / 60Hz		IE1 Applicable
		Before	After	Before	After	Before	After	
1HP	Current (A)	5.2	<u>5.3</u>	5.3	<u>5.5</u>	4.6	<u>4.5</u>	✓
	Speed (min ⁻¹)	1430	<u>1445</u>	1440	<u>1450</u>	1720	<u>1740</u>	
	Efficiency (%)	77.5	<u>72.1</u>	75.6	<u>72.1</u>	81.1	<u>77.0</u>	
1.5HP	Current (A)	7.9	<u>7.8</u>	7.9	<u>8.1</u>	7.1	<u>6.6</u>	✓
	Speed (min ⁻¹)	1440	<u>1445</u>	1440	<u>1450</u>	1720	<u>1745</u>	
	Efficiency (%)	78.6	<u>75.0</u>	75.9	<u>75.0</u>	82.0	<u>79.0</u>	
2HP	Current (A)	10.4	<u>10.3</u>	10.5	<u>10.4</u>	9.4	<u>8.8</u>	✓
	Speed (min ⁻¹)	1450	1450	1450	1450	1740	<u>1750</u>	
	Efficiency (%)	80.1	<u>77.2</u>	77.5	<u>77.2</u>	82.9	<u>81.5</u>	
3HP	Current (A)	15.1	<u>15.8</u>	15.4	<u>15.8</u>	13.4	<u>13.6</u>	×
	Speed (min ⁻¹)	1450	<u>1440</u>	1460	<u>1445</u>	1740	<u>1730</u>	
	Efficiency (%)	82.3	※	82.2	※	85.4	※	

Table 7 : Show changes point on nameplate and label.
(In addition to nameplates and labels, no others changed.)

	Before		After
1) Change point on nameplate for the models listed in Table 1-3 and 1/2HP in Table 5 and 1,1.5,2HP in Table 6 <applied efficiency regulation>	<div>Sample model SCL-QR 1HP</div> <div></div>	Changed Rated current, speed and efficiency	<div></div>
2) Change point on nameplate and label for the models listed in Table 4 and 1/4, 1/3HP in Table 5 and 3HP in Table 6 <non applied efficiency regulation>	<div>Sample model SCL-QR 5HP</div> <div></div> <div></div>	Changed Rated current and speed Removed Rated efficiency and efficiency regulation	<div></div> <div></div>